

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 23. (Canceled Herein)

24. (Currently Amended) A perpendicular magnetic recording medium comprising;
a nonmagnetic substrate;

a first under layer formed on the nonmagnetic substrate, essentially consisting of one of titanium alloy having a hexagonal close-packed structure and a titanium compound and containing titanium;

a second under layer formed in contact with the first under layer and essentially consisting of ~~containing mainly~~ ruthenium; and

a magnetic recording layer formed in contact with the second under layer and containing cobalt.

25. (Previously Amended) The perpendicular magnetic recording medium according to claim 24, wherein said first under layer is formed of a material selected from the group consisting of a nitride, a carbide and oxide of titanium, a titanium chromium alloy, and a elemental titanium.

26. (Previously Amended) The perpendicular magnetic recording medium according to claim 25, wherein said first under layer is formed of a material selected from the group consisting of a nitride of titanium, a titanium chromium alloy, and titanium.

27. (Original) The perpendicular magnetic recording medium according to claim 24,

wherein said magnetic recording layer further contains at least one element selected from the group consisting of platinum and chromium.

28. (Original) The perpendicular magnetic recording medium according to claim 24, wherein said magnetic recording layer further contains platinum and oxygen.

29. (Original) The perpendicular magnetic recording medium according to claim 24, wherein said magnetic recording layer has a multi-layered structure prepared by alternately forming a ferromagnetic layer containing cobalt and a nonmagnetic layer containing one element selected from the group consisting of ruthenium, palladium and platinum.

30. (Original) The perpendicular magnetic recording medium according to claim 24, further comprising a soft magnetic layer interposed between said nonmagnetic substrate and said first under layer.

31. (Original) The perpendicular magnetic recording medium according to claim 30, wherein said soft magnetic layer contains an alloy selected from the group consisting of an iron-aluminum-silicon series alloy, an iron-tantalum-carbon series alloy, an iron-zirconium-nitrogen series alloy, a cobalt-zirconium-niobium series alloy, and an iron-cobalt series alloy.

32. – 36. (Cancelled Herein)

37. (Currently Amended) A perpendicular magnetic recording medium, comprising:
a nonmagnetic substrate; and

a magnetic recording layer formed on the nonmagnetic substrate and having a multi-layered structure including at least two ferromagnetic layers which contain cobalt, platinum and oxygen and are laminated via a nonmagnetic layer ~~containing~~ essentially consisting of ruthenium,

wherein the ferromagnetic layers have the same lattice constant and the same total concentration of an added nonmagnetic element.

38. -39. (Previously Cancelled)

40. (Previously Amended) The perpendicular magnetic recording medium according to claim 26, wherein said titanium chromium alloy contains not more than 10 at% of chromium.

41. (Original) The perpendicular magnetic recording medium according to claim 24, wherein said magnetic recording layer has a single-layer structure of a ferromagnetic layer containing cobalt.

42. (Original) The perpendicular magnetic recording medium according to claim 29, wherein said multi-layered structure includes at least two ferromagnetic layers, and the ferromagnetic layers have the same lattice constant and the same total concentration of an added nonmagnetic element.

43. (Cancelled Herein)

44. (Original) The perpendicular magnetic recording medium according to claim 29, wherein said nonmagnetic layer contains palladium.